
Nutrition

Definition: Respondents who report they consume less than five servings of fruits and vegetables per day.

Prevalence of Respondents Not Consuming at Least Five Servings of Fruits and Vegetables Per Day

- South Dakota 81.0%
- All participants nationwide 76.5%

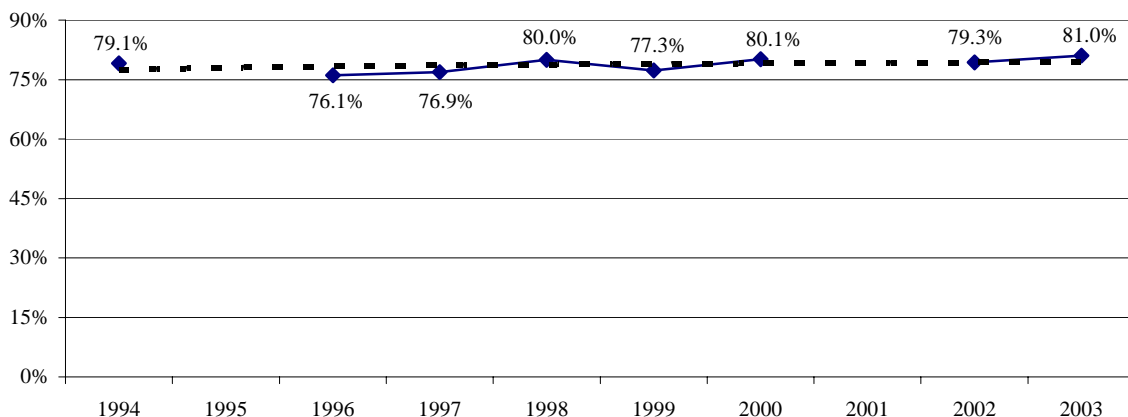
Healthy People 2010 Objective

There was no stated Healthy People 2010 Objective for not consuming at least five servings of fruits and vegetables per day.

Trend Analysis

This question was asked first in 1994 and again from 1996 to 2000 and recently from 2002 to 2003. From 1996 to 2000, the percent of respondents who did not consume at least five servings of fruits and vegetables had been increasing. There was a slight decrease from 2000 to 2002; however, the percent is on the rise again.

Figure 14
Percent of Respondents Who Reported Not Consuming at Least 5 Servings of Fruits and Vegetables Per Day, 1994, 1996-2000, and 2002-2003



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 1994, 1996-2000, and 2002-2003

Demographics

Gender Males show a considerably higher percentage of respondents not consuming at least five servings of fruits and vegetables per day. This gender difference is evident across several demographics including 25-64 year olds, larger household incomes, higher levels of education, those employed for wages, and those that are married.

Age Respondents who report not consuming at least five servings of fruits and vegetables per day generally decreases as age increases with the most notable decrease occurring in the 55-64 year old age group.

Race	There is no appreciable difference in fruit and vegetable consumption between American Indians and whites.
Region	There are no substantial differences in fruit and vegetable consumption among the five regions.
Household Income	There seems to be no association with fruit and vegetable consumption and household income.
Education	Respondents who report not consuming at least five servings of fruits and vegetables per day seems to decrease at the higher levels of education. This decrease is most pronounced for men as college graduates and women when they reach some post-high school education.
Employment Status	Homemakers have a much lower percent of respondents who consume five servings of fruits and vegetables per day than those who are employed for wages, self-employed, or unemployed.
Marital Status	Overall, those who are divorced have a much higher percentage of respondents who do not consume five servings of fruits and vegetables per day than those who are married. This holds true for females, but males do not show the same large difference between these two types of marital status.

Table 18
Respondents Who Reported Not Consuming at Least 5 Servings of Fruits and Vegetables Per Day, 2003

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
Total	5,262	81.0	(79.7-82.2)	2,196	85.3	(83.5-87.0)	3,066	76.8	(75.1-78.5)
Age									
18-24	359	84.1	(79.3-88.0)	170	84.6	(77.1-89.9)	189	83.6	(77.0-88.6)
25-34	659	88.6	(85.6-91.1)	272	93.0	(88.6-95.8)	387	84.0	(79.5-87.7)
35-44	984	85.3	(82.7-87.6)	435	89.3	(85.5-92.3)	549	81.3	(77.4-84.6)
45-54	1,026	84.3	(81.7-86.6)	468	88.7	(85.0-91.6)	558	79.7	(75.8-83.1)
55-64	799	76.0	(72.6-79.2)	335	82.0	(77.1-86.1)	464	70.1	(65.2-74.6)
65-74	690	72.3	(68.4-75.9)	272	75.1	(69.1-80.3)	418	69.8	(64.7-74.5)
75+	710	65.1	(61.1-69.0)	234	69.7	(62.7-75.9)	476	62.4	(57.4-67.1)
Race									
White	4,800	80.9	(79.6-82.2)	2,019	85.2	(83.3-86.9)	2,781	76.7	(74.9-78.5)
American Indian	282	84.6	(79.3-88.8)	103	91.8	(84.8-95.8)	179	79.2	(71.3-85.4)
Region									
Southeast	1,291	81.2	(78.8-83.4)	545	86.1	(82.5-89.0)	746	76.3	(72.8-79.4)
Northeast	1,457	82.3	(80.0-84.4)	594	86.4	(82.9-89.3)	863	78.7	(75.6-81.5)
Central	674	79.9	(76.2-83.1)	279	83.5	(77.9-88.0)	395	76.6	(71.5-81.1)
West	1,445	79.7	(77.2-82.0)	621	83.4	(79.7-86.6)	824	76.1	(72.6-79.2)
American Indian Counties	395	81.0	(76.1-85.1)	157	87.9	(81.8-92.2)	238	75.0	(67.6-81.2)
Household Income									
Less than \$15,000	584	80.5	(76.2-84.3)	194	82.6	(74.5-88.6)	390	79.1	(73.8-83.5)
\$15,000-\$19,999	457	84.8	(80.8-88.1)	155	89.5	(82.7-93.9)	302	81.6	(76.3-85.9)
\$20,000-\$24,999	597	79.2	(75.0-82.9)	257	83.8	(77.4-88.6)	340	74.2	(68.2-79.5)
\$25,000-\$34,999	840	80.9	(77.6-83.8)	354	85.2	(80.3-89.0)	486	77.1	(72.4-81.1)
\$35,000-\$49,999	928	83.1	(80.2-85.6)	420	86.5	(82.4-89.7)	508	79.5	(75.3-83.1)
\$50,000-\$74,999	753	82.0	(78.8-84.9)	355	87.0	(82.5-90.5)	398	76.1	(71.2-80.5)
\$75,000+	568	81.4	(77.7-84.7)	316	86.7	(81.8-90.4)	252	73.2	(66.8-78.7)
Education									
Less than High School	554	80.4	(76.2-84.1)	257	83.4	(77.6-87.9)	297	77.0	(70.5-82.5)
High School or G.E.D.	1,764	83.9	(81.8-85.8)	766	86.0	(82.7-88.8)	998	81.8	(79.0-84.2)
Some Post-High School	1,529	81.1	(78.7-83.3)	571	88.7	(85.4-91.4)	958	74.9	(71.5-78.0)

Table 18 (continued)
Respondents Who Reported Not Consuming at Least 5 Servings of Fruits and Vegetables Per Day, 2003

	Total			Male			Female		
	# Resp.	%	95% CI	# Resp.	%	95% CI	# Resp.	%	95% CI
Employment Status									
Employed for Wages	2,761	85.2	(83.6-86.7)	1,152	89.2	(86.8-91.2)	1,609	81.1	(78.8-83.2)
Self-employed	659	81.2	(77.5-84.5)	445	84.1	(79.7-87.8)	214	73.6	(66.2-79.9)
Unemployed	113	85.4	(75.9-91.6)	*	*	*	*	*	*
Homemaker	253	69.9	(63.3-75.7)	*	*	*	*	*	*
Retired	1,249	69.4	(66.4-72.1)	453	73.6	(68.8-77.8)	796	66.2	(62.5-69.8)
Unable to work	123	80.0	(68.7-88.0)	*	*	*	*	*	*
Marital Status									
Married/Unmarried Couple	3,125	80.5	(79.0-82.0)	1,395	85.3	(83.1-87.2)	1,730	75.8	(73.5-77.9)
Divorced/Separated	695	86.1	(82.9-88.8)	275	87.5	(82.2-91.4)	420	85.1	(80.8-88.5)
Widowed	721	70.2	(66.3-73.7)	120	79.6	(69.3-87.1)	601	68.3	(64.1-72.2)
Never Married	716	85.1	(81.4-88.2)	405	85.4	(80.4-89.3)	311	84.6	(78.9-89.0)

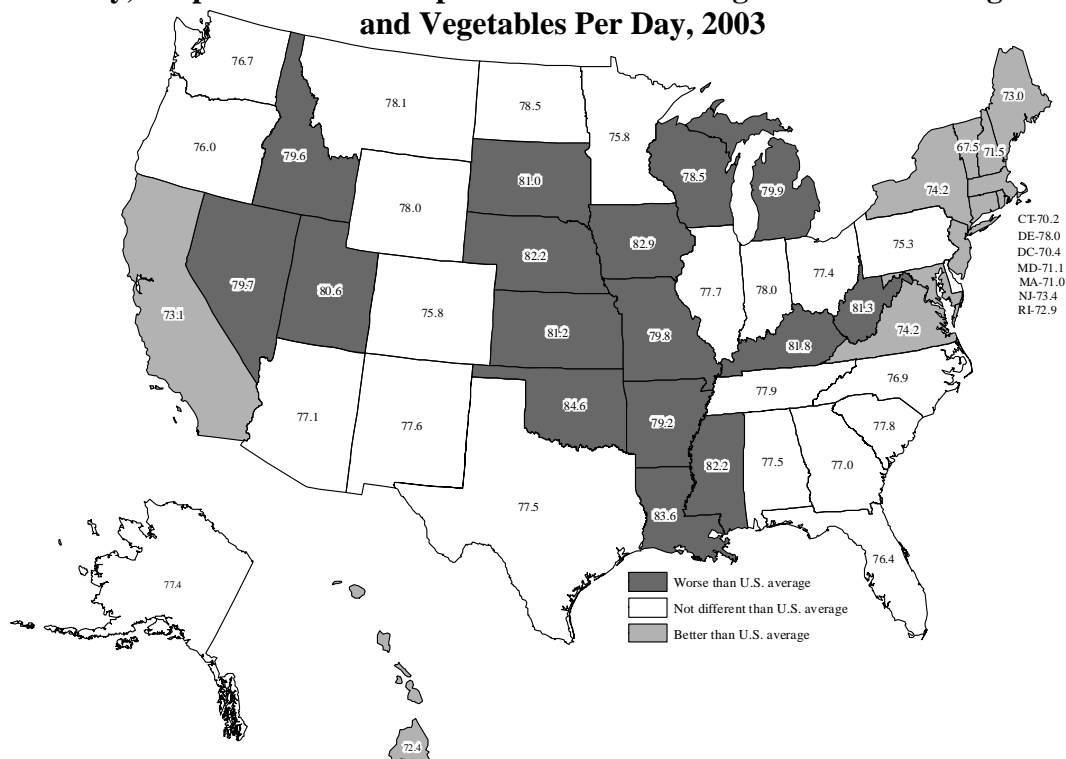
Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003

Note: *Results based on sample sizes less than 100 have been suppressed.

National Statistics

The national percent for respondents who have reported they do not consume at least five servings of fruits and vegetables per day was 76.5 percent. South Dakota was significantly worse than the United States. Vermont had the lowest percent of respondents who reported not consuming at least five servings of fruits and vegetables per day with 67.5 percent, while Oklahoma had the highest percent of respondents who reported not consuming at least five servings of fruits and vegetables per day with 84.6 percent.

Figure 15
Nationally, Respondents Who Reported Not Consuming at Least 5 Servings of Fruits and Vegetables Per Day, 2003



Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003

Further Analysis

Following are data illustrating the percent of those who do not consume at least five servings of fruits and vegetables per day for various health behaviors and conditions. For example, 69.4 percent of respondents who stated they have diabetes did not consume at least five servings of fruits and vegetables per day, while 81.9 percent of respondents who stated they do not have diabetes did not consume at least five servings of fruits and vegetables per day.

Table 19 Not Consuming at Least 5 Servings of Fruits and Vegetables Per Day for Selected Health Behaviors and Conditions, 2003			
Health Behavior or Condition	# Respondents	% Not Consuming Enough Fruits and Vegetables	95% CI
Fair or Poor Health Status	798	75.9	72.3-79.2
Excellent, Very Good, or Good Health Status	4,454	81.8	80.4-83.0
Obese	1,221	83.1	80.7-85.3
Overweight	3,132	82.3	80.7-83.7
Not Overweight	1,917	79.2	76.9-81.3
No Leisure Time Physical Activity	1,280	85.0	82.6-87.1
Leisure Time Physical Activity	3,980	79.9	78.4-81.3
No Moderate Physical Activity	2,846	84.6	83.1-86.0
Moderate Physical Activity	2,253	76.5	74.3-78.5
No Vigorous Physical Activity	4,201	82.5	81.2-83.8
Vigorous Physical Activity	978	75.1	71.6-78.3
Not Doing Anything to Control Weight	1,428	82.9	80.5-85.0
Trying to Lose or Maintain Weight	3,825	80.3	78.8-81.7
Current Smoker	1,141	88.8	86.4-90.9
Former Smoker	1,450	79.2	76.7-81.6
Never Smoked	2,664	78.5	76.7-80.2
Smokeless Tobacco Use	290	87.0	81.2-91.2
No Smokeless Tobacco Use	4,885	80.5	79.2-81.8
Drank Alcohol in Past 30 Days	3,019	85.0	83.4-86.4
No Alcohol in Past 30 Days	2,229	74.8	72.6-76.9
Binge Drinker	796	92.3	89.8-94.2
Not a Binge Drinker	4,437	78.3	76.8-79.7
Heavy Drinker	197	94.1	90.2-96.5
Not a Heavy Drinker	5,034	80.4	79.1-81.6
Hypertension	1,562	75.7	73.3-78.0
No Hypertension	3,693	82.7	81.2-84.1
High Blood Cholesterol	1,396	75.9	73.2-78.3
No High Blood Cholesterol	2,709	78.9	77.0-80.6
No Mammogram within Past Two Years (40+)	495	76.5	72.0-80.4
Mammogram within Past Two Years (40+)	1,695	72.1	69.6-74.4
Insufficient Cervical Cancer Screening	319	80.0	74.6-84.4
Sufficient Cervical Cancer Screening	1,913	78.5	76.4-80.5
No Health Insurance (18-64)	367	86.3	81.4-90.1
Health Insurance (18-64)	3,379	83.6	82.1-85.0
Employer Based Health Insurance Coverage (18-64)	2,369	84.4	82.7-86.0
Private Plan (18-64)	511	83.0	78.8-86.4
Medicaid or Medical Assistance (18-64)	118	74.5	62.9-83.5
The Military, CHAMPUS, TriCare, or the VA (18-64)	131	84.9	75.9-90.9
Indian Health Service (18-64)	145	87.9	81.2-92.5
No Flu Shot (65+)	326	67.9	61.9-73.4
Flu Shot (65+)	1,073	68.6	65.4-71.6

Table 19 (continued)
Not Consuming at Least 5 Servings of Fruits and Vegetables Per Day for Selected
Health Behaviors and Conditions, 2003

Health Behavior or Condition	# Respondents	% Not Consuming Enough Fruits and Vegetables	95% CI
No Pneumonia Shot (65+)	501	70.9	66.3-75.2
Pneumonia Shot (65+)	874	66.5	62.9-69.9
Diabetes	453	69.4	64.4-73.9
No Diabetes	4,807	81.9	80.6-83.1
Current Asthma	370	81.7	76.4-86.0
Former Asthma	143	77.8	68.5-85.0
Never Had Asthma	4,733	81.1	79.7-82.3
Arthritis	1,779	77.1	74.8-79.2
No Arthritis	3,444	82.7	81.1-84.1
Arthritis - Activities Limited	836	76.2	72.6-79.4
No Arthritis - Activities Limited	4,378	81.8	80.4-83.1
Disability - Activities Limited	1,125	76.1	73.1-78.9
No Disability - Activities Limited	4,100	82.2	80.8-83.5
Disability with Special Equipment Needed	371	69.9	63.7-75.4
No Disability with Special Equipment Needed	4,858	81.7	80.4-82.9
Injured in a Fall (45+)	177	76.6	68.8-82.9
Not Injured in a Fall (45+)	3,061	76.3	74.6-78.0
Sunburn in Past 12 Months	2,003	85.4	83.5-87.1
No Sunburn in Past 12 Months	3,239	77.4	75.7-79.0
Military Veteran	862	83.5	80.6-86.0
Not a Military Veteran	4,354	80.6	79.1-81.9

Source: The Behavioral Risk Factor Surveillance System, South Dakota Department of Health, 2003